



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,201	01/02/2007	Yoshitaka Nishio	49288,2800	4462
20322	7590	06/07/2011	EXAMINER	
SNELL & WILMER L.L.P. (Main)			LEE, LAURA MICHELLE	
400 EAST VAN BUREN			ART UNIT	PAPER NUMBER
ONE ARIZONA CENTER				
PHOENIX, AZ 85004-2202			3724	
MAIL DATE		DELIVERY MODE		
06/07/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,201	<b>Applicant(s)</b> NISHIO ET AL.
	<b>Examiner</b> LAURA LEE	<b>Art Unit</b> 3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 8/12/2010.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 7-9, 16-18, 60, 66 is/are pending in the application.
  - 4a) Of the above claim(s) 7-9 and 16-18 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 60 and 66 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-878)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No./Mail Date 9/7/2010
- 4) Interview Summary (PTO-413)  
 Paper No./Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Caim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 60 and 66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 60, line recites "wherien the plurality of belts are driven at a speed the same as the substrate supporting means and in a direction opposite to the moving direction of the substrate supporting means." However, as the plurality of belts are the substrate supporting means, it is not understood, what the applicant is trying to convey. Instead, it is believed that the applicant intended for the limitation to read -- wherien the plurality of belts are driven at a speed the same as the scribing device guide body and in a direction opposite to the moving direction of the scribing device guide body --. However, at this time, the applicant's true intent is unclear as is the scope of the claim language.

Claim 60, lines recites that the "substrate supporting means has a plurality of belts supporting the substrate" then in line , claim 60 further recites that "the substrate supporting means comprises a substrate supporting device." It is not understood, how the substrate supporting means can have both a plurality of belts and a substrate supporting device. Applicant should note that the limitations such as "the substrate

supporting means" are therefore not in compliance with the Supplemental Guidelines published in the Official Gazette on July 25, 2000. Such limitations cannot be used to invoke 35 USC 112, 6th paragraph, and have therefore been given their broadest reasonable interpretation, without considering equivalence. Additionally, it is not understood, if the belts are part of the device or a separate structure? How can the means be two different structures?

Claim 66, line 4, recites that "the plurality of belts are driven at a speed the same as the substrate supporting means and in a direction opposite to the moving direction of the substrate supporting means." However, as the plurality of belts are the substrate supporting means, it is not understood, what the applicant is trying to convey. Instead, it is believed that the applicant intended for the limitation to read -- wherien the plurality of belts are driven at a speed the same as the scribing device guide body and in a direction opposite to the moving direction of the scribing device guide body --. However, at this time, the applicant's true intent is unclear as is the scope of the claim language.

Claim 66, [lines] recites that the "substrate supporting means has a plurality of belts supporting the substrate" then in line , claim 60 further recites that "the substrate supporting means comprises a substrate supporting device." It is not understood, how the substrate supporting means can have both a plurality of belts and a substrate supporting device. Applicant should note that the limitations such as "the substrate supporting means" are therefore not in compliance with the Supplemental Guidelines published in the Official Gazette on July 25, 2000. Such limitations cannot be used to

invoke 35 USC 112, 6th paragraph, and have therefore been given their broadest reasonable interpretation, without considering equivalence. Additionally, it is not understood, if the belts are part of the device or a separate structure? How can the means be two different structures?

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 60 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueyama et al. WO02/057192), herein referred to as Ueyama; see Publication 2004/0040997 for English translation in view of Dryon (U.S. Patent 3,600,992).

5. As best understood, in regards to claim 60, Ueyama discloses a substrate cutting system (figure 17), comprising: a pair of scribing line forming means (scribing portions 42/43; fig. 18 ) arranged facing each other (fig. 18); a pair of scribing devices (cutter wheel chips 51/51) for supporting the pair of scribing line forming means such that one of the pair of scribing line forming means moves on a first surface of a substrate in an X axial direction (along rails 44 of portion 42) and the other of the pair of scribing line forming means moves on a second surface of the substrate in the X axial direction (along rails 44 of portion 43) ; a scribing device guide body (supporting member 50/50) for supporting the pair of scribing devices (51/51) such that the pair of scribing devices

moves in a Y axial direction (arrow 71); and a substrate supporting means (upstream/downstream tables 5b/6b) for supporting the substrate in an X-Y plane such that the pair of scribing forming line means scribes the first surface of the substrate and the second surface of the substrate; where the substrate supporting means (5b/6b) is located on both sides of the pair of scribing devices relative to the Y direction; and is configured to be relatively movable to the Y axis direction relative to the substrate, and wherein the pair of scribing devices (51/51) forms a scribing line by moving in the Y axis (arrow 71 / arrow J; paragraph [0107]) direction relative to the substrate in conjunction with the substrate supporting device (Figure 19).

Although Ueyama discloses that the substrate can be moved in to position utilizing upstream and downstream motorized tables 5b and 6b, Ueyama does not disclose wherein the substrate supporting means has a plurality of belts supporting the substrate, wherein the plurality of belts are driven at a speed the same as the substrate supporting means/ scribing device guide body in a direction opposite to the moving direction of the substrate supporting means/scribing device guide body; wherein the substrate supporting means comprises a substrate supporting device supported by the scribing device guide body, wherein the substrate supporting device moves in the Y-axis direction in conjunction with the pair of scribing devices, and a fixing device for fixing the substrate in the X-Y plane; at least one rotation transmission means for circling the plurality of belts in accordance with the movement of the scribing movement of the scribing device guide body.

However, attention is directed to the Dryon glass positioning system which utilizes an upstream and downstream conveyor comprised series of belts to move the glass sheet into the desired position relative to the cutting. Dryon discloses that the upstream and downstream conveyor are driven at the same speed as set by the upstream conveyor. As belts are a well known conveying means and as shown by Dryon to be established as a means of transferring glass to and from a cutting head assembly (3), it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the Ueyama conveyors to be belt conveyors as taught by Dryon as both systems allow for the transport and positioning of the glass workpiece relative to the cutter system.

Therefore, the modified device of Ueyama discloses wherien substrate supporting means has a plurality of belts (Dryon 11/14; fig. 1) supporting the substrate, wherien the plurality of belts are (capable of being by reducing the speed of rotation of the motor; see Dryon col. 2, line 71- col. 3, line 11) driven at a speed the same as the substrate supporting means/ scribing device guide body (50/50) in a direction opposite to the moving direction of the substrate supporting means/scribing device guide body (50/50); wherein the substrate supporting means comprises a substrate supporting device (belts/5b/6b) supported by the scribing device guide body(50/50), wherein the substrate supporting device (belts/5b/6b) moves in the Y-axis direction in conjunction with the pair of scribing devices (51/51), and a fixing device (holding apparatus 58) for fixing the substrate in the X-Y plane; at least one rotation transmission means (motor

reduction gearing unit 15) for circling the plurality of belts in accordance with the movement of the scribing movement of the scribing device guide body.

6. In regards to claim 66, as best understood, Ueyama discloses a substrate cutting method (figure 17), comprising: forming by a pair of scribing devices (cutter wheel chips 51/51), a scribing line by moving in the Y axis direction relative to the substrate in conjunction with a substrate supporting device (50/50); wherein a pair of scribing line forming means (scribing portions 42/43; fig. 18 ) are arranged facing each other (fig. 18); wherein the pair of scribing devices (cutter wheel chips 51/51) support the pair of scribing line forming means such that one of the pair of scribing line forming means moves on a first surface of a substrate in an X axial direction (along rails 44 of portion 42) and the other of the pair of scribing line forming means moves on a second surface of the substrate in the X axial direction (along rails 44 of portion 43) ; wherein the scribing device guide body (supporting member 50) supports the pair of scribing devices (51/51) such that the pair of scribing devices moves in a Y axial direction (arrow 71); and wherein in the substrate supporting means (upstream/downstream tables 5b/6b) supports the substrate in an X-Y plane such that the pair of scribing forming line means scribes the first surface of the substrate and the second surface of the substrate, where the substrate supporting means (5b/6b) is placed in both sides of Y axis direction of the pair of scribing devices, and is configured to be relatively movable to the Y axis direction relative to the substrate in conjunction with the pair of scribing devices (51/51; fig. 18/19), and wherein the pair of scribing devices (51/51) forms a scribing line by moving

in the Y axis (arrow 71 / arrow J) direction relative to the substrate in conjunction with the substrate supporting device (Figure 19; paragraph [0107]).

Although Ueyama discloses that the substrate can be moved in to position utilizing upstream and downstream motorized tables 5b and 6b, Ueyama does not disclose wherein the substrate supporting means has a plurality of belts supporting the substrate, wherein the plurality of belts are driven at a speed the same as the substrate supporting means/ scribing device guide body in a direction opposite to the moving direction of the substrate supporting means/scribing device guide body; wherein the substrate supporting means comprises a substrate supporting device supported by the scribing device guide body, wherein the substrate supporting device moves in the Y-axis direction in conjunction with the pair of scribing devices, and a fixing device for fixing the substrate in the X-Y plane; at least one rotation transmission means for circling the plurality of belts in accordance with the movement of the scribing movement of the scribing device guide body.

However, attention is directed to the Dryon glass positioning system which utilizes an upstream and downstream conveyor comprised series of belts to move the glass sheet into the desired position relative to the cutting. Dryon discloses that the upstream and downstream conveyor are driven at the same speed as set by the upstream conveyor. As belts are a well known conveying means and as shown by Dryon to be established as a means of transferring glass to and from a cutting head assembly (3), it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the Ueyama conveyors to be belt conveyors as taught by

Dryon as both systems allow for the transport and positioning of the glass workpiece relative to the cutter system.

Therefore, the modified device of Ueyama discloses wherien substrate supporting means has a plurality of belts (Dryon 11/14; fig. 1) supporting the substrate, wherien the plurality of belts are (by reducing the speed of rotation of the motor; see Dryon col. 2, line 71- col. 3, line 11) driven at a speed the same as the substrate supporting means/ scribing device guide body (50/50) in a direction opposite to the moving direction of the substrate supporting means/scribing device guide body (50/50); wherein the substrate supporting means comprises a substrate supporting device (belts/5b/6b) supported by the scribing device guide body(50/50) , wherein the substrate supporting device (belts/5b/6b) moves in the Y-axis direction in conjunction with the pair of scribing devices (51/51), and a fixing device (holding apparatus 58) for fixing the substrate in the X-Y plane; at least one rotation transmission means (motor reduction gearing unit 15) for circling the plurality of belts in accordance with the movement of the scribing movement of the scribing device guide body.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 60 and 66 have been considered but are moot in view of the new ground(s) of rejection. It is first noted that the claims, especially claim 66 is very difficult to follow. Secondly, it is noted that there is no limitation that the belts are moving at the same speed and at opposite directions as the scribing devices at the same time to create the scribe line. Such that they are capable

of being used, i.e. with a variable speed conveyor, where they both move at similar speeds but possibly at different times for various cutting purposes.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/595,201  
Art Unit: 3724

Page 11

Primary Examiner, Art Unit 3724  
5/24/2011